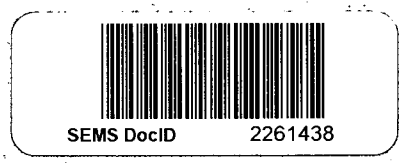
ORIGINAL (Red)

WESTON MANAGERS DESIGNERS/CONSULTANTS
5 Underwood Court
Delran, NJ 08075
Phone: 609-461-4003
Fax: 609-461-4916

TECHNICAL ASSISTANCE TEAM FOR EMERGENCY RESPONSE REMOVAL AND PREVENTION
EPA CONTRACT 68-WO-0036



M E M O R A N D U M

TO: Steve Jarvela, Senior OSC, U.S. EPA Region III
Superfund Removal Branch

THRU: (b) (4) ler, TATL, Region III MZ TDD# 9304-16
PCS# 4453

FROM: (b) (4) , TATM, Region III HS

SUBJECT: Findings of the Data Search Regarding PCBs
At the Shaffer Electric Company Site
Minden, Fayette County, West Virginia.

DATE: June 16, 1993

INTRODUCTION

On April 16, 1993, Senior On-Scene Coordinator (OSC) Jarvela asked the U.S. EPA Technical Assistance Team (TAT) to review the records of past activities at the Shaffer Electric Company (SEC) Site, Minden, Fayette County, West Virginia. He requested a report that would include:

a) analytical data from U.S. EPA sampling and soil excavation activities on site,
b) a scaled site map showing the location of these activities.

TAT studied site files, the OSC report, other site-related documents, site photographs, and aerial photos available from the Region III Central Record Room, from the TAT office and from the OSC. TAT also used a scaled map of the main area of the site from the Environmental Photo Interpretation Center (EPIC), Warrenton, Virginia, obtained through OSC Jarvela; this map shows the property lines and the sampling baseline.

Most of the historic site drawings and sketches are not to scale. In many cases, descriptions in the site/sampling logs of sampling and excavation locations contain few scalar references to permanent features. The site maps accompanying this document are based on aerial photography and are to scale. Utilizing the available site documents and TAT's best technical judgement, sampling and excavation locations have been identified on these maps as accurately as possible; in some cases, estimation has been necessary. Map 1 is the site boundary map.

For ease of handling, each of the accompanying maps has been divided into three sheets (A, B, and C). The relationship of these sheets to each other is shown in Map 10.

While preparing this report, TAT focused on polychlorinated biphenyls (PCBs) as the site contaminant because other contaminants detected are present at levels below EPA action levels. Sampling by the Concerned Citizens to Save Fayette County (CCSFC) has not been included in this report, as the sample locations have not been put in a scaled drawing.

The summary of analytical results for the major sampling events has been presented in a table form and is included in this report as attachments (Table 1-11). A key to these analytical data summary is also included as an attachment.

For the purpose of this report, TAT considered an area/sample clean if the analytical results were less than 50 parts per million (ppm) of PCBs.

SITE DESCRIPTION AND HISTORY

The Shaffer Electric Company Site is located in Minden, Fayette County, West Virginia (Figure 1), off Old Minden Road. The original site was approximately one acre in area and contained one building (Shaffer Electric Building) and a small shed. During the 1984-87 EPA removal activities, the site was expanded when contamination was found on the adjacent properties (Map 1). The site lies in a valley surrounded by hills and is relatively flat, although it slopes in the north towards Arbuckle Creek, which flows northeast. The site is bounded on the south by hills. On the west, there is a fence near the Shaffer Electric Building, and the site extends westward to a roadway separating the site from several residences. A fence and a gate are present along the northeast border of the site. There are several residences along the east side of the site.

From 1970 to 1984, SEC built electrical substations for the local coal mining industry. The substations incorporated various types of transformers, capacitors, switches and related voltage regulation and distribution devices. Oil containing PCBs was used in the electrical transformers and other equipment. SEC stored non-essential, damaged, or outdated transformers and capacitors on site. Leaks from the equipment, possible spills, and dumping practices appear to be responsible for the PCB contamination.

The West Virginia Department of Natural Resources (WVDNR) inspected the site in September 1984 and found several hundred transformers and capacitors on site. Analysis of a composite surface soil sample and a grab soil/sediment sample from a site drainage way to Arbuckle Creek indicated elevated levels of PCBs on site.

At the request of WVDNR, the U.S. EPA investigated the site and subsequently performed two removal actions. The first removal action was performed from December 1984 through December 1987, and the second one was performed from November 1990 through January 1991.

MAJOR SITE ACTIVITIES BY U.S. EPA

The U.S. EPA performed the preliminary site assessment on October 3, 1984. No sample location sketch was found for this sampling event, so log book descriptions were used to place the sample locations on the site map (Map 2). The sample numbers for this event are prefixed by the letter "A" on the map. The analytical results for the eight soil/sediment samples collected are shown in Table 1.

A second sampling event was conducted from November 1 to 2, 1984. During this event, a sampling baseline was established on site, and 105 surface and subsurface soil, sediment, and water samples were collected. In the site documents, most of the sample points were referenced to this baseline and so could be placed accurately on the accompanying site map (Map 2); however, some sample locations could not be placed, either because they were outside the map boundary or because they could not be positively identified. The sample numbers for this event are prefixed by the letter "B" on the map. The analytical results are shown in Table 2.

Further sampling was conducted from January 4 to 6, 1985. During this event, a total of 108 surface and subsurface soil, sediment, and water samples were collected from locations on and off site. The sample location sketch was difficult to read and some locations were outside the boundaries of the accompanying site map (Map 3).

The sample points were placed on the map on the basis of TAT's best professional judgement. The sample location numbers are prefixed by the letter "C" on the map. The analytical results are shown in Table 3.

On February 23, 1985, 13 soil and water samples were collected from around the site. As most of these sampling locations are outside the site, they do not appear on an attached map. The analytical results are shown in Table 4.

From February 1985 through November 1987, EPA excavated two areas west of the Shaffer Electric Building and disposed of 4,735 tons of contaminated soil at a landfill in Emelle, Alabama. As the excavation boundaries were not surveyed and the scaled and unscaled sketches available in the site files were not congruent, the boundaries of the excavated areas were drawn on the accompanying map (Map 4) on the basis of TAT's best professional judgement. The excavated areas are marked on the map as "Area I" and "Area II". Area I was excavated 6 inches, and post-excavation samples showed PCB concentrations below 50 ppm. Area II was excavated 2 feet; post-excavation samples taken from the Berwind Property portion of the site contained less than 50 ppm PCBs. There are records that part of the Shaffer property in Area II was also found to be clean, but the location of the portion sampled is not clear. There is no record of any other post-excavation sample in that area.

At the request of the Agency for Toxic Substances and Disease Registry (ATSDR), on March 16, 1990, the U.S. EPA Field Investigation Team collected 37 surface and subsurface soil, sediment and water samples from locations on and off site. Most of the sampling locations could be identified from the description, and those locations that are within the map boundaries are shown on Map 4. Sample numbers for this event are prefixed with the letter "E" on the map. The analytical results for PCBs are shown in Table 5.

On May 22, 1990, the U.S. EPA Technical Assistance Team resampled, for verification purposes, a number of the same locations that tested positive for PCBs during the March 1990 sampling event and several additional locations, for a total of 16 surface and subsurface soil samples. The approximate locations of most of these sampling points could be identified from the description in the chain-of-custody forms, and are shown on Map 4. The sample numbers are prefixed by the letter "F". The analytical results are shown in Table 6.

On June 14, 1990, 30 soil samples were collected, mainly from four areas of the site, in response to reports made by the Concerned Citizens to save Fayette County (CCSFC) at the May 29, 1990, public meeting. Most of the sampling locations could be identified from the site log except for the areas referred to as Area C and Area 3, a staging area, in the site documents. These sample locations were delineated on the accompanying map (Map 5) on the basis of TAT's best technical judgement. The sample numbers are prefixed by the letter "G". The analytical results are shown in Table 7.

From November 2 to 3, 1990, EPA excavated six areas on site. As a scaled sketch showing the location of these areas was unavailable, the boundaries were drawn on the accompanying map (Map 9) on the basis of TAT's best technical judgement; these areas are labeled as "Areas III, IV, V, VI, VII, and VIII" on the map. Areas III, IV, VII and VIII were each excavated 6 inches, Area V was excavated 1 foot, and Area VI was excavated 3 feet; the depth of excavation was determined using field screening methods. The excavated soil was staged in a containment cell built at the staging area on site while EPA contractors collected 41 soil samples from the bottom of the excavated areas and several other locations. All but one of these locations could be identified on Map 6, where the sample location numbers are prefixed by the letter "H". The analytical results, shown in Table 8, indicate that Areas IV, VII, and VIII are clean. The concentration of PCBs in Area VI at 3 feet in depth was 722 ppm; however, a sample from the shoulder of the excavation pit showed PCBs at less than 50 ppm. The level of PCBs in Area III ranged from 6.3 to 2,030 ppm at 6 inches in depth, and in Area V ranged from 45 to 10,500 ppm at 1 foot in depth.

Based on the analytical results of November 2 to 3, 1990, Area V was resampled on November 27, 1990, using a tighter grid. A total of 16 surface/subsurface soil samples were collected. The sample locations are shown on Map 7, and the sample numbers are prefixed by the letter "I". The analytical results, shown in Table 9, had PCB levels ranging from 1.5 to 2,940 ppm. The background sample was found to have 174 ppm of PCBs.

On the basis of the analytical results from November 1 to 3 and November 27, 1990, additional excavation of Areas III and V was conducted. Area III was excavated by an additional 1 foot to 1.5 feet in depth. The eastern part of Area V was excavated down to 2.5 feet in depth, and the western part was excavated down to 4 feet in depth. All excavated soil was transported off site for disposal.

Composite soil samples were collected from the bottom of the excavated areas after completion of the excavation. All

excavations were then back filled with soil from a borrow area south of the Shaffer Electric Building. The borrow area was also sampled, and the background location of the November 27, 1990, sampling event was resampled, for a total of 13 samples, including 9 composite samples. The sample locations area shown on Map 8, with the sample numbers prefixed by the letter "J". The analytical results are shown in Table 10.

All sampling locations which were not excavated are shown on Map 9, and the analytical results of those soil and sediment locations which had more that 50 ppm of PCBs are consolidated in Table 11.

FINDINGS

For purposes of this discussion, the site has been divided into four sections: A, B, C, and D. These divisions were made based on historic activities. The relationship of these sections to each other is shown on Map 9.

Section A:

A sufficient number of samples to characterize this section have been collected and analyzed. All of the sample locations with PCB concentrations greater than 50 ppm have been excavated to depths of six inches to two feet, and post excavation samples were clean. Only one sampling location, CS162 (840 ppm), located on the east side of a concrete pad, might not have been excavated.

Section B:

A sufficient number of surface and subsurface soil and sediment samples have also been collected and analyzed to characterize this section. During the 1985-1987 excavation, two feet of soil were removed from the areas found to be contaminated. There are records that one part of the pit was gridded and sampled after excavation and found to be clean. There is no clear information about the location of this part. Also, there is no clear indication if the other part of the pit was sampled and found to be clean. The excavated area was backfilled with 2 feet of clean soil.

During the March 16, 1990, sampling event, locations ES4 (55 ppm), ESC7 (110 ppm) and ESED8 (660 ppm) were found to have PCBs at concentrations greater than 50 ppm. During the verification sampling, only location FS07 (52.7 ppm), the same location as sample ES4, was found to have more than 50 ppm of PCBs. There is no indication whether or not this location was re-excavated.

During the June 14, 1990, sampling event, locations GS25 (383 ppm) and GS26 (40,302 ppm) were found to have elevated levels of PCBs. These locations were excavated to a depth of three feet and the pit was sampled (HS01). The analytical results indicated 722 ppm of PCBs. The pit was not excavated further and was filled with clean soil.

Area VIII was a hot spot discovered during the second excavation. This area was field screened, excavated and sampled (HS02) and was found to have less than 50 ppm of PCBs. The area was backfilled with clean soil.

Section C:

The major portion of this section was sampled several times, which was adequate to characterize this section. Area III was excavated to 1.5 feet, then divided into five parts for post-excavation sampling. Five composite post-excavation samples were collected. Two samples, JS08 (3.05 ppm) and JS09 (38.1 ppm), were clean; the other three samples, JS04 (395 ppm), JS06 (542 ppm) and JS07 (369 ppm), showed PCB levels greater than 50 ppm. The area was not excavated further and was backfilled with 1.5 feet of clean soil. Area IV has been excavated 6 inches; when post-excavation samples (HS18, HS38 and HS39) came out clean, the area was backfilled. The eastern part of Area V was excavated to 2.5 feet and the post-excavation sample (JS01) was clean. The western part of Area V was excavated to 4 feet; after post-excavation sample JS02 showed PCBs to be present at a concentration of 1,000 ppm. The area was not excavated further and was backfilled with 4 feet of clean soil.

Samples CS140 (59 ppm), CS142 (100 ppm), CS143 (150 ppm), and CS144 (210 ppm) were collected from the roadway north and west of the building. Though these locations had elevated levels of PCBs, there is no indication whether these locations have been excavated. There is also no indication whether sample location FS15 (374.4 ppm) was excavated.

Section D:

The overall sampling data available for this section is not sufficient to make a conclusive finding. Only a small number of samples have been collected from this section, although almost all of them contained PCBs at less than 50 ppm. No core sample was collected from this area. The background location sample, IS14 (174 ppm), showed elevated levels of PCBs but a resampling (JS12 and JS13) confirmed that the location contained less than 50 ppm PCBs. Prior to receiving excavated soil from other parts of the site, the staging area was itself excavated to 6 inches; after

disposal of the staged excavated soil, the staging area was sampled. The eastern portion of the staging area showed less than 50 ppm of PCBs (JS05, 27 ppm), while the western portion showed elevated levels PCBs (JS04, 121 ppm). The staging area was not excavated further and was backfilled with 6 inches of clean soil.

Of all the sediment sample locations throughout the site, only a few with elevated levels of PCBs were not addressed during either of the removal actions. In addition, a few more sampling locations with elevated levels of PCBs could not be positively identified and so it cannot be concluded if those locations have been addressed (see Table 11 and Map 9).

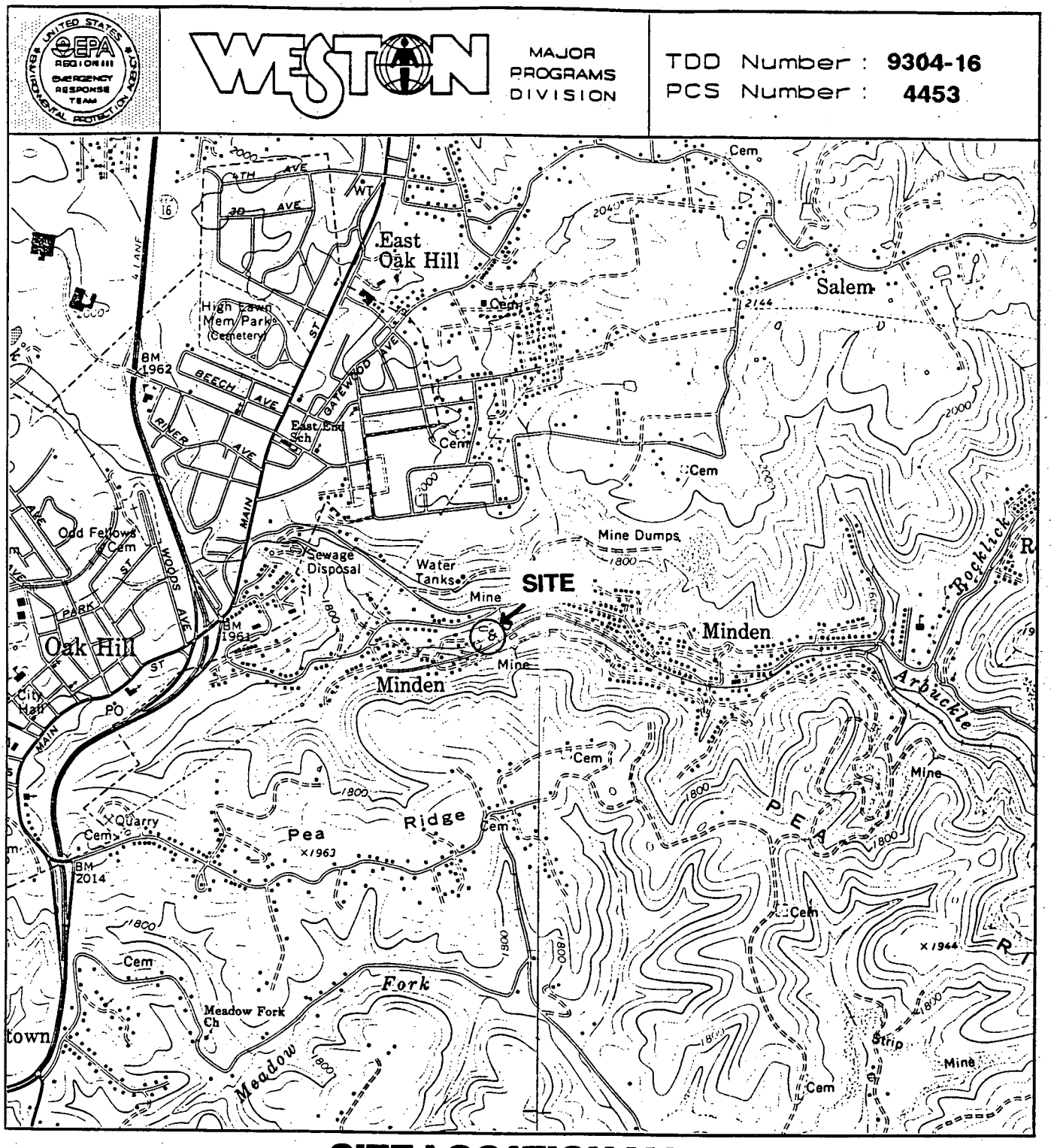
Soil and water from several locations outside the site were sampled at different times and the results did not show any elevated levels of PCBs.

Attachments:

Figure - 1	Site location map
Table - 1	Analytical data summary for October 3, 1984, sampling event
Table - 2	Analytical data summary for November 1-2, 1984, sampling event
Table - 3	Analytical data summary for January 4-6, 1985, sampling event
Table - 4	Analytical data summary for February 23, 1985, sampling event
Table - 5	Analytical data summary for March 16, 1990, sampling event
Table - 6	Analytical data summary for May 22, 1990, sampling event
Table - 7	Analytical data summary for June 14, 1990, sampling event
Table - 8	Analytical data summary for November 2-3, 1990, sampling event
Table - 9	Analytical data summary for November 27, 1990, sampling event
Table - 10	Analytical data summary for January 24, 1991, sampling event
Table - 11	Analytical data summary for soil and sediment locations with elevated levels of PCBs that were not excavated
-	Key to analytical data summary tables and maps
Map - 1	Site boundary map
Map - 2	Sample location map for October 3, 1984, and November 1-2, 1984, sampling events
Map - 3	Sample location map for January 4-6, 1985, sampling event
Map - 4	Sample location map for March 16, 1990, and May 22, 1990, sampling events
Map - 5	Sample location map for June 14, 1990, sampling event
Map - 6	Sample location map for November 2-3, 1990, sampling event
Map - 7	Sample location map for November 27, 1990, sampling event
Map - 8	Sample location map for January 24, 1991, sampling event
Map - 9	Sample location map for locations not excavated
Map - 10	Index map

Shaffer Electric Company Site, Minden, WV
June 16, 1993

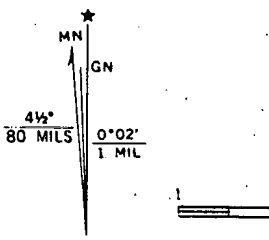
FIGURE - 1



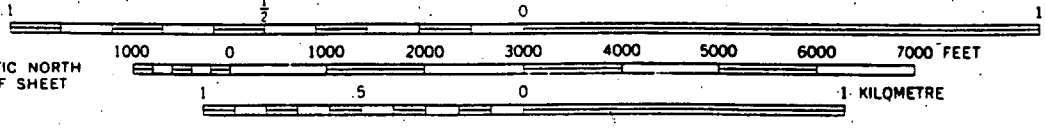
SITE LOCATION MAP

SHAFFER ELECTRIC COMPANY SITE
MINDEN, FAYETTE COUNTY, WEST VIRGINIA

USGS 7.5 MINUTE OAK HILL AND THURMOND, WV QUADRANGLE
SCALE 1:24 000



UTM GRID AND 1976 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET



QUADRANGLE LOCATION

TABLE – 1

ANALYTICAL DATA SUMMARY

SHAFFER ELECTRIC COMPANY SITE, MINDEN, FAYETTE COUNTY, WV

DATE OF SAMPLING: OCTOBER 3, 1984

MAP LOC #	SAMPLE #	LOCATION	PCBs CONC	UNITS
	00	Sample blank	< 1.0	ppm
ASED01	01	Arbuckle Creek, downstream	4.0	ppm
AS02	02	Ditch to Arbuckle Creek	260.0	ppm
AS03	03	Composite transformer soil	8,200.0	ppm
AS04	04	Capacitor spillage (surface)	260,000.0	ppm
ASC05	05	Capacitor spillage (12" core)	40,000.0	ppm
AS06	06	Main transformer area	33.0	ppm
ASED07	07	Arbuckle Creek, upstream	3.0	ppm
AS08	08	Transformer at site access	< 1.0	ppm

Sample locations in the Map Loc # column can be found in Map # 2

TABLE – 2

ANALYTICAL DATA SUMMARY

SHAFFER ELECTRIC COMPANY SITE, MINDEN, FAYETTE COUNTY, WV

DATE OF SAMPLING: NOVEMBER 1–2, 1984

MAP LOC #	SAMPLE #	LOCATION	PCBs CONC	UNITS
BS001	001	56, –9	370.0	ppm
BSC002	002	56, –9 Core 12"	14.0	ppm
BS003	003	50, 25	1,100.0	ppm
BSC004	004	50, 25 Core 12"	130.0	ppm
BS005	005	50, 74 not perpendicular to baseline (bermside)	510.0	ppm
BSC006	006	50, 74 not perp. to baseline (bermside) core 12"	5.2	ppm
BS007	007	50, 124 (50" from 005)	390.0	ppm
BSC008	008	50, 124 (50' from 005) core 12"	110.0	ppm
BS009	009	50, 38 (something hard underneath, no core)	190.0	ppm
BS010	010	50, 51	1.9	ppm
BSC011	011	50, 51 Core 8"	2.2	ppm
BS012	012	50, 67	2,100.0	ppm
BSC013	013	50, 67 Core 12–15"	6.2	ppm
BS014	014	109, 25	47.0	ppm
BSC015	015	109, 25 Core 16–20"	3.5	ppm
BS016	016	144, –30	10.0	ppm
BSC017	017	144, –30 Core 8–12"	110.0	ppm
BS018	018	225, 19 next to capacitor in drainage area to creek	340.0	ppm
BSC019	019	225, 19 Core 8", white sand and clay	690.0	ppm
BS020	020	261, –9 next to capacitor	210,000.0	ppm
BSC021	021	261, –9 Core 12–16"	19,000.0	ppm
BS022	022	255, 18 near drums across road from capacitor	405.0	ppm
BSC023	023	255, 18 Core	7.5	ppm
BS024	024	285, –13 in grass by capacitor	110.0	ppm
BSC025	025	285, –13 Core 15–18"	3.4	ppm
BS026	026	334, –21 in front of "DOW" drum	2.2	ppm
BSC027	027	334, –21 Core 15–18"	6.0	ppm
BS028	028	358, –26 former transformer area	17.0	ppm
BSC029	029	358, –26 Core	< 1.0	ppm
BS030	030	478.5, –10.5 front of transformer area	37.0	ppm
BSC031	031	478.5, –10.5 Core	2.1	ppm
BS032	032	495, –13.5 in transformer area	48.0	ppm
BSC033	033	495, –13.5 Core 12"	5.1	ppm
BS034	034	503, 22	27.0	ppm
BSC035	035	503, 22	3.4	ppm
BS036	036	25, 0	52.0	ppm
BS037	037	25, 50	64.0	ppm

Sample locations in the Map Loc # column can be found in Map # 2
The first number in the Location column indicates the distance along the baseline from its starting point in front of the Shaffer Electric Building. The second number is the perpendicular distance from the baseline unless otherwise specified. "+" means northside and "–" means southside of the baseline.

TABLE – 2

ANALYTICAL DATA SUMMARY

SHAFFER ELECTRIC COMPANY SITE, MINDEN, FAYETTE COUNTY, WV

DATE OF SAMPLING: NOVEMBER 1–2, 1984

MAP LOC #	SAMPLE #	LOCATION	PCBs CONC	UNITS
BS038	038	25, 75	46.0	ppm
BS039	039	25, −25	57.0	ppm
BS040	040	25, −50	3.8	ppm
BS041	041	25, 0 (duplicate of 036)	66.0	ppm
BS042	042	50, −25	12.0	ppm
BS043	043	50, −50	58.0	ppm
BS044	044	75, 0	390.0	ppm
BS045	045	75, 25	400.0	ppm
BS046	046	75, 49	28.0	ppm
BS047	047	75, −25	3.8	ppm
BS048	048	75, −44	12.0	ppm
BS049	049	100, 0	250.0	ppm
BS050	050	100, 25	610.0	ppm
BS051	051	100, 50	4,200.0	ppm
BS052	052	100, −25	330.0	ppm
BS053	053	125, 0	140.0	ppm
BS054	054	125, 25	22.0	ppm
BS055	055	125, −25	2,700.0	ppm
BS056	056	125, −25 (duplicate of 055)	2,900.0	ppm
BS057	057	150, 0	160.0	ppm
BS058	058	150, −25	11,000.0	ppm
BS059	059	175, 0	260.0	ppm
BS060	060	175, 21	250.0	ppm
BS061	061	175, −25	49,000.0	ppm
BS062	062	200, 0	33.0	ppm
BS063	063	200, 25	210.0	ppm
BS064	064	200, −25	110.0	ppm
BS065	065	225, 0	510.0	ppm
BS066	066	225, 25	190.0	ppm
BS067	067	225, −25	110.0	ppm
BS068	068	250, 0	1,800.0	ppm
BS069	069	275, 0	450.0	ppm
BS070	070	250, −10	11,000.0	ppm
BS071	071	275, 25	5.0	ppm
BS072	072	300, 0	130.0	ppm
BS073	073	300, 17	31.0	ppm
BS074	074	300, −20	12.0	ppm

Sample locations in the Map Loc # column can be found in Map # 2
The first number in the Location column indicates the distance along the baseline from its starting point in front of the Shaffer Electric Building. The second number is the perpendicular distance from the baseline unless otherwise specified. "+" means northside and "−" means southside of the baseline.

TABLE – 2

ANALYTICAL DATA SUMMARY

SHAFFER ELECTRIC COMPANY SITE, MINDEN, FAYETTE COUNTY, WV

DATE OF SAMPLING: NOVEMBER 1–2, 1984

MAP LOC #	SAMPLE #	LOCATION	PCBs CONC	UNITS
BS075	075	325, 0	25.0	ppm
BS076	076	325, 17	9.4	ppm
BS077	077	325, –19	15.0	ppm
BS078	078	350, 0	93.0	ppm
BS079	079	350, 20	13.0	ppm
BS080	080	350, –25	21.0	ppm
BS081	081	375, 0	190.0	ppm
BS082	082	375, –21	6.7	ppm
BS083	083	400, 0	81.0	ppm
BS084	084	400, –22	30.0	ppm
BS085	085	425, 0	24.0	ppm
BS086	086	425, –21	4.7	ppm
BS087	087	450, 0	8.4	ppm
BS088	088	450, –12	100.0	ppm
BS089	089	475, 0	410.0	ppm
BS090	090	475, –17	8.2	ppm
	091		28.0	ppm
	092	Sediment from Arbuckle Creek 200' upstream	< 1.0	ppm
	093	Background soil 75' uphill from Mini's Grocery	< 1.0	ppm
	094	Background soil across street from [redacted] residence	< 1.0	ppm
BSED095	095	Arbuckle Creek sediment upstream at bridge	< 1.0	ppm
BS096	096	Bank soil, fisrt drainage to Arbuckle Creek	< 1.0	ppm
BSED097	097	Sediment at 2nd site drainage (steel I–beam on bank)	< 1.0	ppm
	098	Sediment at third site drainage (near scrap, past boiler)	190.0	ppm
	099	Creek sediment 20' upstrem of main drainage ditch	2.2	ppm
	100	Creek sediment 3' downstream of main drainage ditch	140.0	ppm
BSED101	101	Downstream sediment (upstream at bridge)	98.0	ppm
	102	Downstream soil (last house before brigde)	< 1.0	ppm
	103	Blank (distilled water)	< 1.0	ppm
	104	Blank (distilled water)	< 1.0	ppm
	105	Blank (distilled water)	< 1.0	ppm

Sample locations in the Map Loc # column can be found in Map # 2
The first number in the Location column indicates the distance along the baseline from its starting point in front of the Shaffer Electric Building. The second number is the perpendicular distance from the baseline unless otherwise specified. "+" means northside and "–" means southside of the baseline.

TABLE – 3

ANALYTICAL DATA SUMMARY

SHAFFER ELECTRIC COMPANY SITE, MINDEN, FAYETTE COUNTY, WV

DATE OF SAMPLING: JANUARY 4–6, 1985

MAP LOC #	SAMPLE #	LOCATION	PCBs CONC	UNITS
CS128	128	1 – At Command Post fence	14.0	ppm
CS129	129	17 – Pit behing (north) Command Post	ND	ppm
CS130	130	2 – Next to decon	12.0	ppm
CS131	131	3 – 1st closest house to Command Post	ND	ppm
CS132	132	4 – 2nd closest house to Command Post	ND	ppm
CS133	133	5 – 1st residence by basketball	2.0	ppm
CS134	134	6 – House opposite end, east	ND	ppm
CS135	135	7 – Old garage	ND	ppm
CS136	136	8 – Army truck adjacent to #5	ND	ppm
CS137	137	9 – Conveyor	ND	ppm
CS138	138	10 – Yard, abandoned house #	ND	ppm
CS139	139	11 – Front of mine shaft	ND	ppm
CS140	140	12 – Behind shop in driveway	59.0	ppm
CS141	141	13 – At stream behind shop	76.0	ppm
CS142	142	14 – Driveway	100.0	ppm
CS143	143	15 – Corner of building	150.0	ppm
CS144	144	16 – Mid driveway	210.0	ppm
CS145	145	87 – Entrance driveway	ND	ppm
CS146	146	88 – Entrance driveway ditch (oily)	10.0	ppm
CS147	147	18	8.3	ppm
CS148	148	19	110.0	ppm
CS149	149	20	800.0	ppm
CS150	150	21	5.5	ppm
CS151	151	22 – Utility pole	34.0	ppm
CS152	152	23	17.0	ppm
CS153	153	24	440.0	ppm
CS154	154	25 – Adjacent 2nd house	11.0	ppm
CS155	155	26	5.0	ppm
CS156	156	27	44.0	ppm
CS157	157	28	24.0	ppm
CS158	158	29	2.0	ppm
CS159	159	30	10.0	ppm
CS160	160	31	ND	ppm
CS161	161	32	ND	ppm
CS162	162	75 – East of concrete pad	840.0	ppm
CS163	163	76 – North of concrete pad	ND	ppm
CS164	164	77 – West of concrete pad	ND	ppm
CS165	165	78 – South of concrete pad	ND	ppm

Sample locations in the Map Loc # column can be found in Map # 3
The numbers in the Location column correspond to the sampling map in the site file except for a few changes where the description does not match with the location on the map.

TABLE – 3

ANALYTICAL DATA SUMMARY

SHAFFER ELECTRIC COMPANY SITE, MINDEN, FAYETTE COUNTY, WV

DATE OF SAMPLING: JANUARY 4–6, 1985

MAP LOC #	SAMPLE #	LOCATION	PCBs CONC	UNITS
CS166	166	33	ND	ppm
CS167	167	34	ND	ppm
CS168	168	35	ND	ppm
CS169	169	36	94.0	ppm
CS170	170	37	200.0	ppm
CS171	171	38	290.0	ppm
CS172	172	38	310.0	ppm
CS175	175	42 – Drum area	150.0	ppm
CS176	176	43 – Drum area	190.0	ppm
CS177	177	44 – In front of transformer	1,500.0	ppm
CS178	178	45 – In front of transformer	900.0	ppm
CS179	179	46 – In front of transformer	60.0	ppm
CS180	180	47 – Near big transformer	800.0	ppm
CS181	181	48 – Near big transformer	140.0	ppm
CS182	182	49 – Near big transformer	700.0	ppm
CS183	183	50 – Back of junk yard	45.0	ppm
CS184	184	51 – Back of junk yard (inside bush)	73.0	ppm
CS185	185	52 – Back of junk yard	460.0	ppm
CS186	186	53 – Back of junk yard	950.0	ppm
CS187	187	54 – Back of junk yard	390.0	ppm
CS188	188	55 – Back of junk yard	80.0	ppm
CS189	189	56 – Clear area	130.0	ppm
CS190	190	57 – Clear area	4.8	ppm
CS191	191	58 – Clear area	2,800.0	ppm
CS192	192	59 – Clear area	ND	ppm
CS193	193	61 – Clear area	ND	ppm
CS194	194	62 – Near hydrant	16.0	ppm
CS195	195	63	ND	ppm
CS196	196	64	ND	ppm
CS197	197	65	5.0	ppm
CS198	198	60	14.0	ppm
CS199	199	66	ND	ppm
CS200	200	101	16.0	ppm
CSC201	201	102 – Core	ND	ppm
CS202	202	103	1,300.0	ppm
CSC203	203	104 – Core	2,000.0	ppm
CS204	204	105	1,300.0	ppm
CSC205	205	106 – Core	1,000.0	ppm

Sample locations in the Map Loc # column can be found in Map # 3
The numbers in the Location column correspond to the sampling map in the site file except for a few changes where the description does not match with the location on the map.

Shaffer Electric Company Site, Minden, WV
June 16, 1993

TABLE – 3

ANALYTICAL DATA SUMMARY

SHAFFER ELECTRIC COMPANY SITE, MINDEN, FAYETTE COUNTY, WV

DATE OF SAMPLING: JANUARY 4–6, 1985

MAP LOC #	SAMPLE #	LOCATION	PCBs CONC	UNITS
CS206	206	107	29,000.0	ppm
CSC207	207	108 – Core	34,000.0	ppm
CS208	208	109	47,000.0	ppm
CSC209	209	110 – Core	41,000.0	ppm
CS210	210	111	ND	ppm
CSC211	211	112 – Core	4.0	ppm
CS212	212	113	3.1	ppm
CSC213	213	114 – Core	3.5	ppm
CS214	214	115	ND	ppm
CSC215	215	116 – Core	ND	ppm
	216	Rock Lick water supply water	ND	ppb
	217	Post Office spring water	ND	ppb
	218	[redacted] composite soil	15.0	ppm
	219	[redacted] composite soil (across from Lewis)	ND	ppm
	220	[redacted] yard composite soil	15.0	ppm
	221	[redacted] yard composite soil	11.0	ppm
	222	[redacted] composite soil	15.0	ppm
CSED223	223	86 – Sediment upstream	ND	ppm
	224	80 – Sediment by house	ND	ppm
CSED225	225	82 – Arbuckle Creek adjacent to building	25.0	ppm
CSED226	226	83 – 300 feet downstream from building	73.0	ppm
CSED227	227	84 – 500 feet downstream from building	14.0	ppm
CSED228	228	85 – 700 feet downstream of building	17.0	ppm
CSED229	229	89 – At bridge downstream	6.0	ppm
	230	81 – Water outfall stream	180.0	ppb
	231	40 – First pond	3.8	ppb
	232	41 – Outfall underflow	49.0	ppb
CSW233	233	79 – Spring	16.0	ppb
CSW234	234	117 – Upstream	ND	ppb
CSW235	235	118 – Water downstream at CSED229	2.3	ppb

Sample locations in the Map Loc # column can be found in Map # 3
The numbers in the Location column correspond to the sampling map in the site file except for a few changes where the description does not match with the location on the map.

Shaffer Electric Company Site, Minden, WV
June 16, 1993

TABLE – 4

ANALYTICAL DATA SUMMARY

SHAFFER ELECTRIC COMPANY SITE, MINDEN, FAYETTE COUNTY, WV

DATE OF SAMPLING: FEBRUARY 23, 1985

MAP LOC #	SAMPLE #	LOCATION	PCBs CONC	UNITS
	01	[redacted] bank, composite soil(6 miles from site)	7.0	ppm
	02	[redacted] yard, composite soil (6 miles from site)	< 1.0	ppm
	03	[redacted] tap water (6 miles from site)	< 1.0	ppb
	04	1.5 miles #28 yard composite soil	1.0	ppm
	05	Cornfield, soil (.9 miles from site)	3.0	ppm
	06	Minden mine shaft, water	< 1.0	ppb
	07	100 yds downstream shaft, water	< 1.0	ppb
	08	Oak Hill water supply, water	< 1.0	ppb
	09	Sediment 1/4 mile at Grubb's yard	1.0	ppm
	10	Sediment 1/2 mile at bridge	6.0	ppm
	11	[redacted] comp soil (1/3 mile downstream)	< 1.0	ppm
	12	[redacted] comp soil (across from [redacted]	< 1.0	ppm
	00	Sample blank	< 1.0	ppb

There is no entry in the Map Loc # column as the locations are either outside the map boundaries or could not be positively identified.

ORIGINAL (Red)

Shaffer Electric Company Site, Minden, WV
June 16, 1993

TABLE – 5

SHAFFER ELECTRIC COMPANY SITE, MINDEN, FAYETTE COUNTY, WV

DATE OF SAMPLING: MARCH 16, 1990

MAP LOC #	SAMPLE #	LOCATION	PCBs CONC	UNITS
ES1	S–1	Depression east of building	240.0	ppm
ES2	S–2	Southeast corner of shed north of building	17.0	ppm
ES3	S–3	Depression southwest of building, west of fence	4.7	ppm
ES4	S–4	24" soil excavation area	55.0	ppm
ES5	S–5	Southern 24" soil excavation area	7.2	ppm
ES6	S–6	24" soil excavation area	36.0	ppm
ESC7	S–7	Location same as S–6, 36" auger	110.0	ppm
ES8	S–8	6" soil excavation area	ND	ppm
ES9	S–9	6" soil excavation area	10.0	ppm
ES10	S–10	South of 6" soil excavation area	ND	ppm
ES11	S–11	6" soil excavation area (duplicate of S–9)	0.2	ppm
ES12	S–12	On road in 6" soil excavation area	0.6	ppm
ESC13	S–13	Location same as S–12, 12" auger	0.4	ppm
ES14	S–14	Duplicate at S–1	160.0	ppm
	S–100	Background, 400' south of SW corner of building	ND	ppm
	S–101	3' from creek bank, rear of house # [redacted]	1.0	ppm
	S–102	3' from fence along creek bank at house [redacted]	2.1	ppm
ES103	S–103	Soil pile in minden mine shaft mouth	0.1	ppm
ES104	S–104	Level red dog fill area, about 100' south of building	ND	ppm
ESC105	S–105	Location same as S–104, 20" auger	ND	ppm
ES106	S–106	Below 3 transformers on north side of building	5.8	ppm
ES107	S–107	Between houses 317 and 318	0.1	ppm
ESED7	SD–7	Drainage ditch at northwest corner of building	110.0	ppm
ESED8	SD–8	Drainage ditch 24" soil excavation area	660.0	ppm
ESW1	SW–1	Arbuckle Creek 200' upstream of bridge on west	ND	ppm
ESED1	SD–1	Location same as SW–1	ND	ppm
ESW2	SW–2	15' upstream of confluence in tributary NW of site	ND	ppm
ESED2	SD–2	Location same as SW–2	ND	ppm
ESW3	SW–3	Arbuckle Creek 25' upstream of drainage ditch	ND	ppm
ESED3	SD–3	Location same as SW–3	ND	ppm
ESW4	SW–4	Arbuckle Creek 25' downstream of drainage ditch	ND	ppm
ESED4	SD–4	Location same as SW–4	ND	ppm
ESW5	SW–5	Arbuckle Creek 40' downstream of bridge on NE	ND	ppm
ESED5	SD–5	Location same as SW–5	5.2	ppm
ESW6	SW–6	Duplicate of SW–6	ND	ppm
	PW–2	American Water Co. Minden mine intake	ND	ppb
	PW–3	Arbuckle public service Rocklick mine intake	ND	ppb

Sample locations in the Map Loc # column can be found in Map # 4

TABLE – 6

ANALYTICAL DATA SUMMARY

SHAFFER ELECTRIC COMPANY SITE, MINDEN, FAYETTE COUNTY, WV

DATE OF SAMPLING: MAY 22, 1990

MAP LOC #	SAMPLE #	LOCATION	PCBs CONC	UNITS
FS01	S01	6" Excavation area (ES9/ES11)	0.7	ppm
FS02	S02	Drainage ditch below culvert, 2' excavation area	41.9	ppm
FS03	S03	Drainage ditch below S02 (ESED8)	35.7	ppm
FS04	S04	Duplicate at location S03	39.2	ppm
FS05	S05	2'soil excavation area (ES6)	43.1	ppm
FSC06	S06	Location same as S05, core 36"	9.6	ppm
FS07	S07	2' soil excavation area (ES4)	52.7	ppm
FS08	S08	Drainage ditch NW corner of building (ESED7)	112.1	ppm
FS09	S09	Southeast corner of shed (ES2)	538.9	ppm
FS10	S10	Off northeast corner of building	82.0	ppm
FS11	S11	Next to east post of 3 transformer units (ES106)	48.5	ppm
FS12	S12	Depression east of building (ES1)	375.0	ppm
FS13	S13	Duplicate at S12 (ES14)	192.8	ppm
FS14	S14	Shaley area stressed very east of building	0.1	ppm
FS15	S15	Low area east of building between bridges	374.4	ppm
	S16	Near top of access road (background)	0.5	ppm

Sample locations in the Map Loc # column can be found in Map # 4

TABLE – 7

ANALYTICAL DATA SUMMARY

SHAFFER ELECTRIC COMPANY SITE, MINDEN, FAYETTE COUNTY, WV

DATE OF SAMPLING: JUNE 14, 1990

MAP LOC #	SAMPLE #	LOCATION	PCBs CONC	UNITS
GS01	S01	Bank sample across from area 2	8.7	ppm
GS02	S02	East of area 2, across creek passed bridge	4.0	ppm
GS03	S03	Area 3 across shale pile, grid 1	ND	ppm
GS04	S04	Area 3 across shale pile, grid 4	1.5	ppm
GS05	S05	Area 3 across shale pile, grid 5	0.9	ppm
GS06	S06	Area 3 across shale pile, grid 6	ND	ppm
GS07	S07	Area 3 across shale pile, grid 7	1.7	ppm
GS08	S08	Area 3 across shale pile, grid 8	2.1	ppm
GS09	S09	Area 3 across shale pile, grid 9	BQL	ppm
GS10	S10	Area 2 east end of the building, grid 1	297.2	ppm
GS11	S11	Area 2 east end of the building, grid 2	4,318.5	ppm
GS12	S12	Area 2 east end of the building, grid 3	148.0	ppm
GS13	S13	Area 2 east end of the building, grid 4	467.9	ppm
GS14	S14	Area 2 east end of the building, grid 5	164.2	ppm
GS15	S15	Area 2 east end of the building, grid 6, depression	1,297.0	ppm
GS16	S16	Area 2 east end of the building, grid 7	29.0	ppm
GS17	S17	Area 1 north of building, grid 1	347.3	ppm
GS18	S18	Area 1 north of building, grid 2	79.2	ppm
GS19	S19	Area 1 north of building, grid 5	39.7	ppm
GS20	S20	Area 1 north of building, grid 6	74.7	ppm
GS21	S21	Area 1 north of building, grid 7 behind shed	864.1	ppm
GS22	S22	Area 1 north of building, grid 10	50.9	ppm
GS23	S23	Area 1 north of building, grid 11	72.1	ppm
GS24	S24	Area 1 north of building, grid 12	2.3	ppm
GS25	S25	Area C across from junk pile, outside fenced area	383.1	ppm
GS26	S26	Area C SE of junk pile, outside fenced area	40,302.8	ppm
GS27	S27	Intersection of ditch and access road	17.3	ppm
GS28	S28	Southeast corner of concrete pad north	178.4	ppm
GS29	S29	Northwest corner of building	10.3	ppm
GS30	S30	NE side of building beneath leaking transformer	2.6	ppm

Sample locations in the Map Loc # column can be found in Map # 5

Shaffer Electric Company Site, Minden, WV
June 16, 1993

TABLE – 8

ANALYTICAL DATA SUMMARY

SHAFFER ELECTRIC COMPANY SITE, MINDEN, FAYETTE COUNTY, WV

DATE OF SAMPLING: NOVEMBER 2–3, 1990

MAP LOC #	SAMPLE #	LOCATION	PCBs CONC	UNITS
HS01	S01	Area C subsurface, 3 feet	722.0	ppm
HS02	S02	Area C Junk pile, shallow excavation	< 0.1	ppm
HS03	S03	Area 2 east end of the building, grid 1, 2, 7, 8	1,090.0	ppm
HS04	S04	Area 2 east end of the building, grid 3, 4, 9, 10	893.0	ppm
HS05	S05	Area 2 east end of the building, grid 5, 6, 11, 12	45.0	ppm
HS06	S06	Area 2 east end of the building, grid 13, 14, 19, 20	6,740.0	ppm
HS07	S07	Area 2 east end of the building, grid 15, 16, 21, 22	5,260.0	ppm
HS08	S08	Area 2 east end of the building, grid 17, 18, 23, 24	1,110.0	ppm
HS09	S09	Area 2 east end of the building, grid 25, 32, 39, 40	45.0	ppm
HS10	S10	Area 2 east end of the building, grid 26, 27, 33, 34	10,500.0	ppm
HS11	S11	Area 2 east end of the building, grid 28, 29, 35, 36	4,520.0	ppm
HS12	S12	Area 2 east end of the building, grid 30, 31, 37, 38	2,230.0	ppm
HS13	S13	Area 2 east end of the building, grid 40, 41, 47, 48	4,430.0	ppm
HS14	S14	Area 2 east end of the building, grid 42, 43, 49, 50	3,190.0	ppm
HS15	S15	Area 2 east end of the building, grid 44, 45, 51, 52	3,120.0	ppm
HS16	S16	Area 2 east end of the building, grab sample	4,890.0	ppm
HS17	S17	Area 2 east end of the building, grab sample	936.0	ppm
HS18	S18	Area 3 trench alongside building across area 1	0.7	ppm
HS19	S19	Backyard near containment cell	0.3	ppm
HS20	S20	Area 1 north of building, grid 1, 4	17.9	ppm
HS21	S21	Area 1 north of building, grid 2, 5	9.6	ppm
HS22	S22	Area 1 north of building, grid 3, 6	16.1	ppm
HS23	S23	Area 1 north of building, grid 7, 11	7.2	ppm
HS24	S24	Area 1 north of building, grid 8, 12	9.3	ppm
HS25	S25	Area 1 north of building, grid 9, 10	10.3	ppm
HS26	S26	Area 1 north of building, grid 13, 14	8.7	ppm
HS27	S27	Area 1 north of building, grid 15, 16	143.0	ppm
HS28	S28	Area 1 north of building, grid 17, 20	6.3	ppm
HS29	S29	Area 1 north of building, grid 18, 19	11.7	ppm
HS30	S30	Area 1 north of building, grid 21, 24	532.0	ppm
HS31	S31	Area 1 north of building, grid 22, 25	808.0	ppm
HS32	S32	Area 1 north of building, grid 23, 26	41.3	ppm
HS33	S33	Area 1 north of building, grid 27, 28, 29	2,030.0	ppm
HS34	S34	Area 1 north of building, grid 30, 31, 32, 33	429.0	ppm
HS35	S35	Area 1 north of building, grid 26, grab sample	11.7	ppm
HS36	S36	Area C near side of fence away from building	< 0.1	ppm
HS37	S37	Area C bank where fill was dug	23.3	ppm
HS38	S38	Side of building opposite of trench	0.8	ppm
HS39	S39	Side of building opposite of trench (top)	10.6	ppm
	S40	Berm dredged from creek	< 0.1	ppm
HS41	S41	Across the street from back entrance	< 0.1	ppm

Sample locations in the Map Loc # column can be found in Map # 6

TABLE – 9

ANALYTICAL DATA SUMMARY

SHAFFER ELECTRIC COMPANY SITE, MINDEN, FAYETTE COUNTY, WV

DATE OF SAMPLING: NOVEMBER 27, 1990

MAP LOC #	SAMPLE #	LOCATION	PCBs CONC	UNITS
IS01	S01	Area 2 east end of the building, grid 26,27,33,34 (6")	344.0	ppm
IS02	S02	Area 2 east end of the building, grid 26,27,33,34 (1')	1,100.0	ppm
IS03	S03	Area 2 east end of the building, grid 13,14,19,20 (6")	209.0	ppm
IS04	S04	Area 2 east end of the building, grid 13,14,19,20 (1')	1.5	ppm
IS05	S05	Area 2 east end of the building, grid 25,32,39,46 (6")	1,169.0	ppm
IS06	S06	Area 2 east end of the building, grid 25,32,39,46 (1')	1,396.0	ppm
IS07	S07	Area 2 east end of the building, grid 15,16,21,22 (6")	138.0	ppm
IS08	S08	Area 2 east end of the building, grid 15,16,21,22 (1')	698.0	ppm
IS09	S09	Area 2 east end of the building, grid 28,29,35,36 (6")	250.0	ppm
IS10	S10	Area 2 east end of the building, grid 28,29,35,36 (1'5")	113.0	ppm
IS11	S11	Area 2 east end of the building, grid 40,41,47,48 (6")	1,790.0	ppm
IS12	S12	Duplicate of S11	184.0	ppm
IS13	S13	Area 2 east end of the building, grid 40,41,47,48 (1')	10.1	ppm
IS14	S14	Background sample behind containment cell	174.0	ppm
IS15	S15	Area 2 east end of the building, grid 17,18,23,24 (6")	2,940.0	ppm
IS16	S16	Area 2 east end of the building, grid 17,18,23,24 (1'4")	112.0	ppm

Sample locations in the Map Loc # column can be found in Map # 7

Shaffer Electric Company Site, Minden, WV
June 16, 1993

TABLE – 10

ANALYTICAL DATA SUMMARY

SHAFFER ELECTRIC COMPANY SITE, MINDEN, FAYETTE COUNTY, WV

DATE OF SAMPLING: JANUARY 24, 1991

MAP LOC #	SAMPLE #	LOCATION	PCBs CONC	UNITS
JS01	S01	Area 2, grid A composite of 7 grab samples (2.5')	0.44	ppm
JS02	S02	Area 2, grid B composite of 7 grab samples (4')	1,000.00	ppm
JS03	S03	Area 1, stake area comp of 5 grab samples (1.5')	395.00	ppm
JS04	S04	Staging area grid D, comp of 7 grab samples (surface)	121.00	ppm
JS05	S05	Staging area grid E, comp of 7 grab samples (surface)	27.00	ppm
JS06	S06	Area 1, grid H comp of 5 grab samples (1.5')	542.00	ppm
JS07	S07	Area 1, grid I comp of 5 grab samples (1.5')	369.00	ppm
JS08	S08	Area 1, grid G comp of 6 grab samples (1.5')	3.05	ppm
JS09	S09	Area 1, grid F comp of 4 grab samples (1.5')	38.10	ppm
JS10	S10	Borrow area (backfill)	0.01	ppm
JS11	S11	Borrow area (backfill)	0.01	ppm
JS12	S12	Background (resample of 11/27/90 background)	0.10	ppm
JS13	S13	Background (resample of 11/27/90 background)	0.10	ppm

Sample locations in the Map Loc # column can be found in Map # 8

Shaffer Electric Company Site, Minden, WV
June 16, 1993

TABLE – 11

ANALYTICAL DATA SUMMARY

SHAFFER ELECTRIC COMPANY SITE, MINDEN, FAYETTE COUNTY, WV

SOIL/SEDIMENT SAMPLE LOCATIONS WITH ELEVATED LEVELS OF PCBS THAT WERE NOT EXCAVATED

MAP LOC #	SAMPLE #	LOCATION	PCBs CONC	UNITS	MAP SECTION
	098	Sediment at 3rd site drainage (near scrap, past boiler)	190.0	ppm	
	100	Creek sediment 3' downstream of main drainage ditch	140.0	ppm	
BSED101 *	101	Downstream sediment (upstream at bridge)	98.0	ppm	D
CS140	140	12 – behind shop in driveway (surface)	59.0	ppm	C
CS142	142	14 – Driveway (surface)	100.0	ppm	C
CS143	143	15 – Corner of building (surface)	150.0	ppm	C
CS144	144	16 – Mid–driveway (surface)	210.0	ppm	C
CS162	162	75 – East of concrete pad (surface)	840.0	ppm	A
CSED226	226	83 – Sediment 300 feet downstream from building	73.0	ppm	D
ES4	S–4	24 inch soil excavation area (surface) (FS07)	55.0	ppm	B
FS07	S07	Same location as ES4 (surface)	52.7	ppm	B
ESC7 **	S–7	24" soil excavation area, 36" auger (FSC06)	110.0	ppm	B
ESED8 **	SD–8	Drainage ditch 24" soil excavation area (FS03 and FS04)	660.0	ppm	B
FS15	S15	Low area east of building between bridges	374.4	ppm	C
HS01 ***	S01	Area C subsurface 3 feet	722.0	ppm	B
JS02 ***	S02	Area 2, grid B composite of 7 grab samples (4')	1,000.0	ppm	C
JS03 ***	S03	Area 1, stake area comp of 5 grab samples (1'5")	395.0	ppm	C
JS04 ***	S04	Staging area grid D, comp of 7 grab samples (surface)	121.0	ppm	D
JS06 ***	S06	Area 1, grid H comp of 5 grab samples (1'5")	542.0	ppm	C
JS07 ***	S07	Area 1, grid I comp of 5 grab samples (1'5")	369.0	ppm	C

Sample locations in the Map Loc # column can be found in Map # 9

* Sediment sample collected from a nearby location (CSED229) on a latter date was found to be clean

** Locations resampled and found to have less than 50 ppm of PCBs

*** Samples collected at the bottom of the excavation pits, and the pits were backfilled with clean soil

ORIGINAL (Red)

Shaffer Electric Company Site, Minden, WV
June 16, 1993

KEY TO ANALYTICAL DATA SUMMARY TABLES AND MAPS

ppm	parts per million, or milligrams per Kilogram, or milligrams per Liter
ppb	parts per billion, or micrograms per Kilogram, or micrograms per Liter
<	less than
ND	not detected
BQL	below quantitation limit

The first letter in the Map Loc # column indicates a sampling event for a particular date, as follows:

A	October 3, 1984, sampling event
B	November 1-2, 1984, sampling event
C	January 4-6, 1985, sampling event
D	February 23, 1985, sampling event
E	March 16, 1990, sampling event
F	May 22, 1990, sampling event
G	June 14, 1990, sampling event
H	November 2-3, 1990, sampling event
I	November 27, 1990, sampling event
J	January 24, 1991, sampling event

The other letter(s) in the Map Loc # column indicate sample type, as follows:

S	soil sample
SC	soil core sample
SED	sediment sample
SW	surface water sample

A blank space in the Map Loc # column indicates either the location is outside the map boundaries or the location could not be positively identified.

Refer to Map #10 for the relationship between map sheet numbers A, B and C.

Refer to Map #9 for the relationship between map sections A, B, C and D.

Refer to Map #9 for excavation areas (Areas I-VIII) and depths of excavation.